## **EXHIBIT 18**

## Certificate of Registration



This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

Marybeth Geters

For a Nondramatic Literary Work UNITED STATES COPYRIGHT OFFICE

REG

TXu 1-336-997

EFFECTIVE DATE OF REGISTRATION

Register of Copyrights, United States of America DU NUI WHILE ABOVE I HIS LINE IF YOU NEED MUNE SPACE USE A SEPARATE CONTINUATION SHEET

TITLE OF THIS WORK ▼ Cisco IOS XR version 3 3

PREVIOUS OR ALTERNATIVE TITLES Cinco IOS XR release 3 3 Cisco Internetwork Operating System XR version 3 3 Cisco Internetwork Operating System XR version 3 3 Cisco Internetwork Operating System XR release 3 3 IOX version 3 3 IOX release 3 3 IOX version 3 3 IOX Release 3 3 IOX NO version 3 3 IOX Release 3 3 IOX version 3 3 IOX versio

	PUBLICATION AS A CONTRI collective work in which the contribu	BUTION If this work was published as a contribution to a peri tion appeared Title of Collective Work ▼	odical, serial, or collect	on, give information about the	
	If published in a periodical or serial g	ive Volume ▼ Number ▼	Issue Date ▼	On Pages ♥	
NOTE Under the law the author of a work made for hire is generally the employer not the employer not the employer of this work that was made for hire work that was made for hire trieck. Yas in the space provided give the employer (or other person for whom the work was prépared) as Author of that part and leave the space for dates of birth and	NAME OF AUTHOR ▼  Cisco Systems Inc		DATES OF BIRTH AND DEATH Year Born ▼ Year Died ▼		
	Was this contribution to the work a twork made for hire?  ☑ Yes □ No	AUTHOR'S NATIONALITY OR DOMICILE  Name of Country  OR  Citizen of  Domiciled in United States  riefly describe nature of material created by thus author in which	THE WORK  - Anonymous?  - Pseudonymous?	HOR S CONTRIBUTION TO If the answer to either of these questions is Yes 27 No Yes see detailed instructions	
	New and revised computer code and documentation  NAME OF AUTHOR ▼  See Attached Form TX/CON for Additional Authors		DATES OF BIRTH AND DRATH Year Born ▼ Year Died ▼		
	Was this contribution to the work a "work made for hire?  Yes  No	AUTHOR'S NATIONALITY OR DOMICILE Name of Country  OR  Citizen of Domiciled in Domic	THE WORK	HOR S CONTRIBUTION TO If the answer to either of these questions is "Yes as detailed instructions	
	NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in white NAME OF AUTHOR ▼		och copyright is claimed. ▼  DATES OF BIRTH AND DEATH  Year Born ▼ Year Died. ▼		
	Was this contribution to the work a 'work made for hire'?  Yes  No  NATURE OF AUTHORSHIP'S	AUTHOR'S NATIONALITY OR DOMICILE  Name of Country  OR  Citizen of  Domiciled mix  neity describe nature of material created by this author in which	THE WORK  - Anonymous?  - Pseudonymous?	HOR S CONTRIBUTION TO If the answer to either of these questions is Yes  No	
B a	YEAR IN WHICH CREATION WORK WAS COMPLETED	)		<u> </u>	
Asseminations before completing this space	the author given in space 2 V Cisco Technology Inc 170 West Tasman Drive San Jose, CA 95134 TRANSFER If the claimant(s) name	ame and address must be given even if the claimant is the same and address must be given even if the claimant is the same and the claimant is the same and the claimant (s) care) different from the author(s) named in the claimant (s) obtained ownership of the copyright ▼	TWO DEPOSIT		

Certificate will be mailed in window envelope to this address

Jason Schrothy Intellectual Property Department / Cisco Technology Inc

Number/Street/Apt ▼

170 West Tasman Drive

City/State/ZIP ▼

San Jose CA 95134

Complete all necessary spaces Sign your application in space 8

cation form stundable filing live in check or mone wable to Register of Copyrights

Library of Congress Copyright Office 101 Independence Avenue S E Washington D C 20559-6000

17 U.S.C. § 508(e). Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 409 or in any written statement filed in connection with the application shall be fined not more than \$2,500

## CONTINUATION SHEET FOR APPLICATION FORMS

- This Continuation Sheet is used in conjunction with Forms CA PA SE SR TX and VA only
  indicate which basic form you are continuing in the space in the upper right hand corner
- If at all possible try to fit the information called for into the spaces provided on the basic form
- If you do not have enough space for all the information you need to give on the basic form use this Continuation Sheet and submit it with the basic form
- If you submit this Continuation Sheet clip (do not tape or staple) it to the basic form and fold the
  two together before submitting them
- Space A of this sheet is intended to identify the basic application.

  Space B is a continuation of Space 2 on the basic application.

  Space B is not applicable to Short Forms.

Space C (on the reverse side of this sheet) is for the continuation of Spaces 1 4 or 6 on the basic application or for the continuation of Space 1 on any of the three Short Forms PA TX or VA.

UNITED STATES COPYRIGHT OFFICE

REGI TXU 1 - 336 - 997

PA PAU SE SEG SEU SR SRU TX XXU VA VAU

EFFECTIVE DATE OF REGISTRATION

(Month) (Dey) (Year)

CONTINUATION SHEET RECEIVED

Page 3 of pages

DO NOT WRITE ABOVE THIS LINE FOR COPYRIGHT OFFICE USE ONLY

IDENTIFICATION OF CONTINUATION SHEET This sheet is a continuation of the application for copyright registration on the basic form submitted for the following work

• TITLE (Give the title as given under the heading. Title of this Work in Space 1 of the basic form.)

Cisco IOS XR version 3 3

Identification of Application

NAME(S) AND ADDRESS(ES) OF COPYRIGHT CLAIMANT(S) (Give the name and address of at least one copyright claimant as given in Space 4 of the basic form or Space 2 of any of the Short Forms PA TX or VA)

Cisco Technology Inc. 170 West Tasman Drive San Jose CA 95134

	DATES OF BIRTH AND DEATH Year Born♥ Year Died♥					
AUTHOR S NATIONALITY OR DOMICILE Name of Country  OR Citizen of Domiciled in Domici	WAS THIS AUTHOR S CONTRIBUTION TO THE WORK Anonymous?  Yes No of these questions is Pseudonymous? Yes No Yes are detailed instructions					
NATURE OF AUTHORSHIP Briefly describe nature of the material created by the author in which copyright is claimed ▼						
	DATES OF BIRTH AND DEATH Year Born▼ Year Died▼					
AUTHOR S NATIONALITY OR DOMICILE Name of Country  OR Citizen of  Domiciled in	WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK Anonymous?  Yes  No of these questions is Yes are detailed instructions					
NATURE OF AUTHORSHIP Briefly describe nature of the material created by the author in which copyright is claimed ▼						
	DATES OF BIRTH AND DEATH Year Born▼ Year Died▼					
AUTHOR S NATIONALITY OR DOMICILE Name of Country  OR Citizen of Domiciled in	WAS THIS AUTHOR S CONTRIBUTION TO THE WORK Anonymous?  Yes No of thes questions is Yes equations is Yes see detailed instructions.					
	Name of Country  OR Cutizen of Domiciled in					

CONTINUATION OF (Che	ck which)	☐ Space 1 ☐ Sp	ace 4 🔲 Spa	ce 6 📝 Si	sace 2b	a
Name of Author	Work For Hire	Domicle	Anonymous	Pseudo- nymous	Nature of Contribution	Continuation of other Spaces
Cisco Technology Inc	Yes	United States	Yes	No	Computer Code & Documenta	tion
Calian Technologies Yes		Canada	Yes	No	Documentation	
Data Connection Ltd	Yes	United Kingdom	Yes	No	Computer Code	
Ensoft Ltd	Yes	United Kingdom	Yes	No	Computer Code	
Fujitsu Japan	Yes	Japan	Yes	No	Computer Code	
HČL .	Yes	India	Yes	No	Computer Code	
MetaData	Yes	Canada	Yes	No	Computer Code	
Oak Hill Corporation	Yes	United States	Yes	No	Documentation	
Pure Solutions	Yes	United States	Yes	No	Computer Code	
QNX Software	Yes	omico States	Yes	No	Computer Code	
SQLink	Yes	Israel	Yes	No	Computer Code	

Certificate will be mailed in window envelope to this address

City/State/ZIP ▼

San Jose CA 95134

Complete all necessary spaces Sign your application

I Application form 2 Number/Street/Apt ▼

1 Application form 2 Number/Street/Apt ▼

2 City/State/ZIP ▼

City/State/ZIP ▼

San Jose CA 95134

Complete all necessary spaces Sign your application

I Application form 2 Number/Street/Apt ▼

2 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application

I Application form 1 Number/Street/Apt ▼

2 Opposit Material Street Sign your application form 1 Number/Street Sign your application form 1 Number/Stree